

TOPFIELD

TF 6000 PVRt

User Guide

*Digital Terrestrial Receiver
Personal Video Recorder*



DVB
Digital Video
Broadcasting

Digital Broadcasting Australia



Dear customer,

Digital Broadcasting Australia (DBA) congratulates you on your decision to purchase a digital receiver set-top box.

Digital Broadcasting Australia is made up of the free-to-air television stations, consumer electronic suppliers, manufacturers and retailers. Together, we want to ensure the smoothest possible transition to digital for viewers and consumers. You can find out more about DBA by visiting our web site, <http://www.dba.org.au>.

As you are one of the first to experience the unique benefits of digital television in Australia, we are inviting you to join the *DBA Early Adopter Club*.

Membership of the *DBA Early Adopter Club* is completely free. Some of the benefits of membership include:

- Receiving regular updates about digital television in Australia
- On-line access to member-only international news on

digital television developments

You can also provide vital feedback on the features of digital television you like and don't like in occasional on-line surveys—so you can help shape digital television in the future.

To register as a member of the *DBA Early Adopter Club*, please enter your contact details on the registration web page at <http://www.dba.org.au/register.asp>.

You will then receive a confirmation of your membership and a sign-on password.

We are looking forward to welcoming you to the *DBA Early Adopter Club*.

Digital Broadcasting Australia

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Chapter 1

Introduction

1.1 Introduction

The TF6000 PVRt digital receiver is fully compliant with the international Digital Video Broadcasting (DVB) standard, and can receive digital broadcastings. For its operation, you need an antenna, which must be installed appropriately.

Unlike analog broadcastings, digital broadcastings are not all assigned to their own frequencies; instead, several television and radio broadcastings are transmitted through a single transponder on a single wideband carrier.

NOTE A transponder is in fact a wireless device, which receives and transmits radio signals at a prescribed frequency range. However, you may regard a transponder as a channel. One channel has one broadcasting in analog broadcast; on the other hand, one transponder has several broadcastings in digital broadcast. So the word **service** is used instead of **channel** to indicate a broadcasting in this document.

To help you with the choice and setting for broadcasting ser-

2 Introduction

vices, a selection of television and radio services have already been programmed for you. So all broadcasting services that have gone on air are available to you. You can find the latest transponder information from various broadcasters on teletext.

The TF 6000 PVRt digital receiver has features as follows:

- The digital receiver is able to memorize up to 2000 television and radio services.
- Electronic program guide provides an overview of program schedules for next few hours.
- You can edit the service list and make your own favorite service list.
- You can view the information of the current television or radio program.
- You can update the firmware of the digital receiver to the latest, which will be provided by the manufacturer.
- The digital receiver features a digital video recorder with two tuners, with which you can record your choice of broadcasting services independently of ones you are currently watching.
- The large storage capacity of the built-in hard disk allows you to record up to 40 hours of material—in case of 80 gigabytes—in excellent picture and sound quality.
- Time shift function is a special technical feature. You can pause the program you are watching and resume it again at a later time. You can quickly find whatever part of the current program by backward or forward search.
- During a recording in progress, you can select a different program from the archive and watch it.

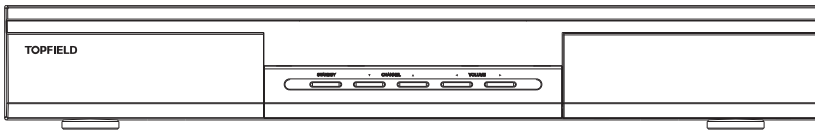
1.2 Controlling the digital receiver

You can control the digital receiver with the remote control and the buttons on the front panel.

NOTE When the digital receiver is off but plugged to a wall outlet, we say that it is in standby mode; on the other hand, when it is on, it is in operation mode. You should keep the digital receiver plugged to a wall outlet so as it can run timer events.

1.2.1 The front panel

The front panel of the digital receiver has buttons to operate the digital receiver, and lamps and a display to indicate its status. Their usage is as follows:



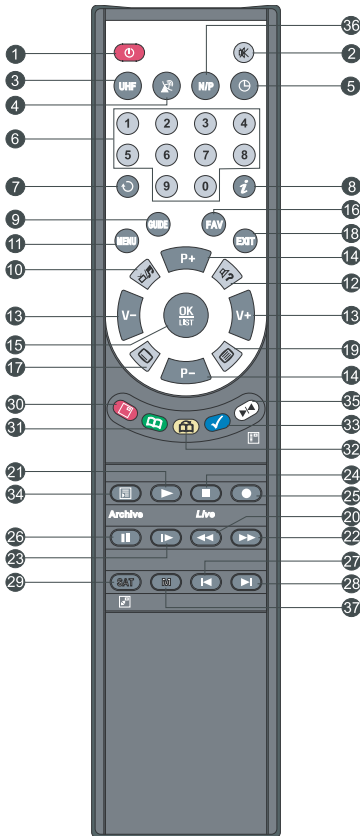
STANDBY button switches the digital receiver in and out of standby mode.

CHANNEL ▲, ▼ buttons move to the next or previous service. In some screens, they also work as up and down movement keys.

VOLUME ◀, ▶ buttons Increase and decrease the volume. In some screens, they also works as right and left movement keys.


















Status display displays the current time in standby mode, and displays the current status of the digital receiver in operation mode.











1.2.2 The remote control





- ① button switches the digital receiver in and out of standby mode.
- ② switches off the sound temporarily. Press again to switch it back on.
- ③ button is unavailable for this model.
- ④ button switches the output of the TV SCART socket between the digital receiver and the device connected to the VCR SCART socket. See §3.2.3.
- ⑤ button sets a sleep timer.
- ⑥ numeric buttons are used to enter service numbers and menu options
- ⑦ button switches between the current service and the previously viewed one.
- ⑧ button displays more information about the current program or a program highlighted in the program guide.

- ⑨ button displays the electronic program guide.
- ⑩ button switches over between the television and radio services.
- ⑪ button displays the main menu, or makes a return to the previous menu from a submenu.






- ⑫  button is used to select an audio track and a sound mode or a multifeed service if available
- ⑬ ,  buttons Increase and decrease the volume. In some screens, they also works as right and left movement keys.
- ⑭ ,  buttons move to the next or previous service. In some screens, they also work as up and down movement keys.
- ⑮  button select items in menus. When viewing live television, it displays the service list
- ⑯  button displays the favorite list.
- ⑰  button is used to select a subtitle track if available.
- ⑱  button is used to leave the current screen.
- ⑲  button displays teletext if available.
- ⑳  button does backward playback or scan. Subsequent presses change the speed of playback.
- ㉑  button plays a recorded program, or displays the progress bar for navigation when playback has already started.
- ㉒  button does fast playback or forward scan. Subsequent presses change the speed of playback.
- ㉓  button starts slow motion playback. Subsequent presses change the speed of playback.
- ㉔  button is used to stop a playback, to stop a recording, or to jump back to live television from time-shifted television.
- ㉕  button starts a recording.
- ㉖  button pauses live television and playback of a recorded program.

- 27  button changes the position of picture-in-picture counterclockwise, and jumps to the end of recording in playback.
- 28  button changes the position of picture-in-picture clockwise, and jumps to the beginning of recording in playback.
- 29  button swaps the picture-in-picture with the main picture. See § 5.5.
- 30  button displays, resizes or hides the picture-in-picture.
- 31  button makes a bookmark during playback or time shift.
- 32  button plays from the next bookmark position.
- 33  button is used to edit a recording.
- 34  button displays the list of recorded programs that have been saved on the digital receiver's hard disk. See § 7.4.
- 35  button displays the service list for picture-in-picture, or specifies a block for repeated playback.
- 36  button is unavailable for this model.







If you do not have wide-screen television but normal screen television, pressing the  button changes, depending on broadcasting conditions, the display format as follows:

When you are viewing a wide-screen television, pressing the  button cycles through the display format options as follows:

4:3 Center Extract → 4:3 Letter Box → 16:9

, , ,  and  buttons have additional different functions per menu besides their own function. Their functions will be guided in the on-screen help.

If the remote control does not work, please check the remote control mode. There are 4 modes with this remote control. You can alter the mode by pressing two buttons simultaneously as follows:

- Mode 1:  + 
- Mode 2:  + 
- Mode 3:  + 
- Mode 4:  + 

The mode 1 will work at default.

Chapter 2

Setup

2.1 Unpacking

Before going any further, check that you have received the following items with your digital receiver.

- Remote control unit
- Two batteries for the remote control (AAA 1.5 V)
- One power cord
- One WLAN antenna
- One component video cable, to link the digital receiver to your television set
- One S-Video cable, to link the digital receiver to your television set
- One RCA AV cable, to link the digital receiver to your television set
- One loop cable, to link the first tuner with the second tuner
- A copy of this user guide

2.2 Safety precautions

Please read and keep the following safety precautions carefully.

- The power must be 90 to 250 volt. Check it before connecting the digital receiver to the wall outlet. For the power consumption of the digital receiver, refer to Table 2.1.
- The wall outlet shall be installed near the equipment and shall be easily accessible.
- The digital receiver is designed to receive, record and play back video and audio signals. Any other use is expressly prohibited.
- When setting up the digital receiver, make sure it is in a horizontal position.
- Do not expose the digital receiver to any moisture. The digital receiver is designed for use in dry rooms. If you do use it outdoors, ensure that it is protected from moisture, such as rain or splashing water. Do not place any vessels such as vases on the digital receiver. These may be knocked over and spill fluid on the electrical components, thus bring about a risk.
- Use only dry cloth when cleaning the digital receiver.
- Do not place the digital receiver close to heating units or in direct sunlight, as this will impair cooling. Place the digital receiver on a hard and level surface. Do not lay any objects such as magazines on the digital receiver. When placed in a cabinet, make sure there is a minimum space of 10 cm around it. For the physical specification of the digital receiver, refer to Table 2.2.
- Protect the power cord from being walked on or pinched particularly at plugs, receptacles and the point where

they exit from the digital receiver.

- Only use accessories specified by the manufacturer.
- Thunderstorms are a danger to all of electrical devices. Even if the digital receiver is switched off, it can be damaged by a lightning strike to the power line or the antenna cable. Always disconnect the power plug and the antenna cable.
- Never open the digital receiver casing under any circumstances. Warranty claims are excluded for the damage resulting from improper handling.
- Refer all servicing to qualified service personnel. Servicing is required when the digital receiver has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilt, objects have fallen into the digital receiver, or the digital receiver has been exposed to rain or moisture, does not operate normally or has been dropped.

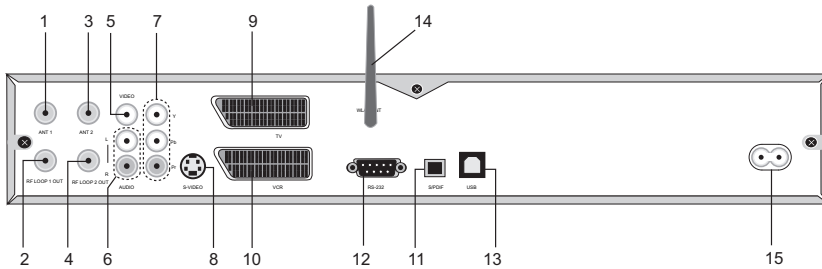
Table 2.1: Power specification

Input voltage	90 to 250 V AC, 50/60 Hz
Power consumption	45 W at maximum in operation 8 W in standby

Table 2.2: Physical specification

Size	430 × 60 × 265 mm
Weight	4.3 kg
Operating temperature	0 to 45 °C
Storage relative humidity	5 to 95 %

2.3 Rear panel connections



- | | |
|-----------------|--|
| ① ANT 1 IN | Broadcasting input socket for the first tuner. |
| ② RF LOOP 1 OUT | Broadcasting output socket through the ANT 1 IN socket for another digital receiver. |
| ③ ANT 2 IN | Broadcasting input socket for the second tuner. |
| ④ RF LOOP 2 OUT | Broadcasting output socket through the ANT 2 IN socket for another digital receiver. |
| ⑤ VIDEO | Composite video output socket for the television set |
| ⑥ AUDIO L/R | Stereo audio output socket for the television set or audio system. |
| ⑦ Y/Pb/Pr | Component video output socket for the television set. |
| ⑧ S-VIDEO | Super video output socket for the television set. |
| ⑨ TV | Audio and video output socket for the television set. |
| ⑩ VCR | Audio and video input / output socket for the video recorder. |

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⑪ S/PDIF	Dolby Digital output socket for the audio system.
⑫ RS-232	Serial port for firmware update and data transfer.
⑬ USB	USB port for firmware update and data transfer.
⑭ WLAN ANT	Antenna for wireless local area network.
⑮ AC INPUT	Connection socket for the power cord supplied.

Table 2.3: Connectors specification

TV	CVBS/S-Video/RGB/YUV video output Left & right audio output
VCR	CVBS video output Left & right audio output CVBS/S-Video/RGB/YUV video input for bypass Left & right audio input for bypass
YPbPr	Component video (YUV) output
S-VIDEO	Super video (S-Video) output
VIDEO	Composite video (CVBS) output
AUDIO	Left & right audio output
S/PDIF	Dolby Digital audio output
RS-232	115.2 kbps at maximum
USB	2.0 Device

2.4 Connecting the digital receiver

There are several ways to set up the digital receiver as described below. Set up the digital receiver suitably to your television and other appliances. If you have any problem with your setup or need a help, contact your dealer or service provider.

You should configure audio and video settings after setup. For detailed descriptions about audio and video settings, refer to §3.2.

Connecting to the terrestrial antenna

Connect the antenna cable to the ANT 1 IN socket on the digital receiver, and then connect the RF LOOP 1 OUT socket and the ANT 2 IN socket with a loop cable.

If you have another digital receiver, plug another cable into the RF LOOP 2 OUT socket on the digital receiver and the corresponding socket on the other digital receiver.

Connecting to the television by SCART connector

Plug a SCART cable into the TV socket on the digital receiver and the corresponding SCART socket on your television.

Connecting to the television by RCA connector

Plug a RCA cable into the VIDEO (yellow), AUDIO L (white) and AUDIO R (red) sockets on the digital receiver and the corresponding input sockets on your television or audio appliance.

Connecting to the television by YUV connector

Plug a standard component video cable into the Y (green), Pb (blue) and Pr (red) sockets on the digital receiver and the corresponding input sockets on your television. You must connect audio sockets on the digital receiver with ones on your television by a RCA cable because the YUV sockets outputs only video signals.

Connecting to the television by S-Video connector

Plug a standard S-Video cable into the S-VIDEO socket on the digital receiver and the corresponding input socket on your television. You must connect audio sockets on the digital receiver with ones on your television by a RCA cable because the S-video socket outputs only video signals.

Connecting to the video recorder by SCART connector

Plug one end of the SCART cable into the VCR socket on the digital receiver. Then, plug the other end of the SCART cable into the input SCART socket on your video recorder if you wish to record a broadcasting program with your video recorder; otherwise if you wish to watch the video that the video recorder plays back just through the digital receiver, plug the other end into the output SCART socket.

2.5 Inserting batteries in the remote control

To insert the batteries, open the battery compartment by removing the lid, and then insert the batteries observing the polarity, which is marked on the base of the battery compartment. Close the battery compartment after that.

If the digital receiver no longer reacts properly to remote control commands, the batteries may be flat. Be sure to remove used batteries. The manufacturer accepts no liability for damage resulting from leaking batteries.

NOTE Batteries, including those which contain no heavy metals, may not be disposed of with household waste. Please dispose of used batteries in an environmentally sound manner. Find out about the legal regulations which apply in your area.

Chapter 3

Preference Settings

3.1 Language settings

You can designate languages for menu, audio track and subtitle track.



To designate the language for menu, audio track or subtitle track, select the System Setting > Language Setting menu.


Menu language

The digital receiver supports a lot of menu languages: Arabic, Dutch, English, German, French, Italian, Russian, Turkish and so forth. Set the Menu Language option to your desired

language. Once you select a language, the menu will be immediately displayed in the selected language.


Subtitle language

Set the 1st Subtitle Language and 2nd Subtitle Language options to your desired languages. If a program does not have the subtitle track of the language set to the 1st Subtitle Language, that set to the 2nd Subtitle Language option will be output. If it does not have the second's subtitle track either, no subtitle will be output.

Apart from this setting, you can select a subtitle track with  button when you watch a program. For detailed descriptions about how to select a subtitle track, refer to §5.1.4.

Audio language

Set the 1st Audio Language and 2nd Audio Language options to your desired languages. If the program does not have the subtitle track of the language set to the 1st Audio Language option, that set to the 2nd Audio Language option will be output. If it does not have the second's audio track either, an ordinary audio track will be output.

Apart from this setting, you can select an audio track with  button when you watch a program. For detailed descriptions about how to select an audio track, refer to §5.1.3.

3.2 Video and audio settings

You have to configure the video and audio settings appropriately to your television set and appliances.



To configure the video and audio settings, select the System Setting > A/V Output Setting menu.

3.2.1 Television standard

The digital receiver supports two types of television standard. One is PAL standard, and the other is NTSC standard. PAL was adopted in European countries while NTSC is adopted in USA, Canada, Mexico and so forth.

If you have a PAL television, you have to set the TV Type option to PAL. In this case, if a service is broadcasted in NTSC standard, the digital receiver converts it into PAL standard for your PAL television. However, its quality would somewhat fall. The opposite case brings about the same result.

The best thing is to watch PAL services with a PAL television and to watch NTSC services with a NTSC television. However, the multi television set is able to process both of them. So if you have an multi television set, set the TV Type option to Multi. With this option, the digital receiver will output them without standard conversion. This setting is most recommended especially if you are not sure what standard television you have.

3.2.2 Color model

The type of the socket that reads TV on the back panel of the digital receiver is SCART. This is also known as Euro-

connector. Through this socket, the digital receiver is able to output video signals of various color models: CVBS, S-Video, YUV and RGB. Audio signals are also output together through this socket.

If you have connected the digital receiver and your television by this connector, you should set the Video Output option to your desired color model. If you have connected them by RCA connector at which VIDEO reads on the back panel of the digital receiver, you do not have to set this option because the digital receiver outputs CVBS video through RCA connector independent of SCART connector.


However, If you have connected them by S-VIDEO connector, you have to set this option to S-Video because the output through S-Video connector comes from the SCART interface. Similarly, if you have done by YUV connectors (Y, Pb and Pr), you have to set this option to YUV because of the same reason.

It is known in general that YUV color model provides the best video quality with little difference from RGB color model while CVBS color model does the least. Anyway, not all televisions with a SCART socket support YUV color model. Make sure your television supports YUV color model before setting the Video Output option to YUV. But there would rarely be television sets that have a SCART socket but do not support RGB color model. So RGB would be the most desirable value for this option.

3.2.3 Video cassette recorder

The SCART socket that reads VCR on the back panel of the digital receiver is for a video recorder. You would have connected the digital receiver to your video recorder or such an appliance by this connector.

If you have connected the VCR socket to the input SCART socket of your video recorder, you have to set the VCR Scart Type option to Standard. If you have connected it to the out-

put SCART socket, the digital receiver will operate differently depending on the setting of the VCR Scart Type option. If the option is set to **Standard**, the digital receiver will pass the video from the video recorder to your television when the video recorder starts playback. But if the option is set to **External A/V**, the digital receiver will not pass the video even though the video recorder starts playback. To pass it, you have to press  button.

NOTE In this case, it is impossible that the digital receiver records the video that the video recorder plays back because the digital receiver is just a bypass for the video recorder.

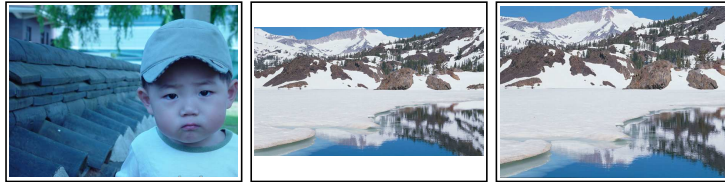
3.2.4 Television aspect ratio

If you have a wide-screen television, set the TV Aspect Ratio option to 16:9.



You can enjoy well both wide-screen programs and normal-screen programs with your wide-screen television as the above figures show. The left figure shows a wide picture displayed in the wide screen, and the right figure shows a normal picture displayed in the wide screen.


If you have a normal-screen television, set the TV Aspect Ratio option to 4:3.



You cannot fully enjoy wide-screen programs with your normal-screen television as the above figures show. The left figure shows a normal picture displayed in the normal screen. To watch wide-screen programs in the shape like the center figure, set the 16:9 Display Format option to Letter Box. Wide-screen pictures then will be reduced to fit to the width of the normal screen. Otherwise to watch them in the shape like the right figure, set the option to Center Extract. Wide-screen pictures then will be cut out on the left and right sides equally to fit to the width of the normal screen.

3.2.5 Sound mode

Basically, there are two audio sources as you can find two audio sockets on the back panel of the digital receiver. You can enjoy only one source or both of them in either stereo or mono. Set the Sound Mode option as you desire.

Apart from this setting, you can change the sound mode with  button when you watch a program. For detailed descriptions about how to change the sound mode, refer to §5.1.3.

3.3 Local time setting

You should set your local time with the digital receiver for timer events.



To set the local time, select the System Setting > Time Setting menu.

You can set the local time either yourself manually or using Greenwich Mean Time (GMT) automatically; however, it is recommended to use the Greenwich mean time.

To set the local time using GMT, perform the following steps:

1. Set the Mode option to Auto.
2. Set the Time Offset option to the time difference corresponding to your time zone referring to Table 3.1.

With the above settings, the digital receiver will scan all transponders specified one by one until to get the Greenwich mean time. Make sure that your local time is displayed right on the Local Time option.

To set the local time yourself, set the Mode option to Manual and enter your local time to the Local Time option with the numeric buttons.

The time format is *day/month/year 24-hour:minute*.

If daylight saving time is observed in your country at the moment, set the Daylight Saving Time option to on.

Table 3.1: Time offset table

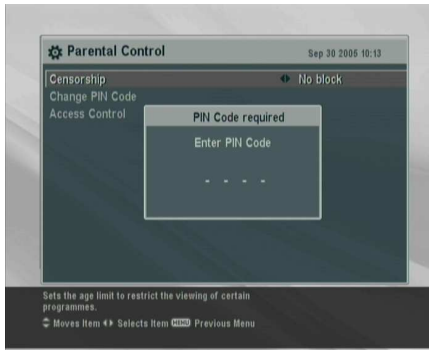
Time offset	City
GMT – 12:00	Eniwetok, Kwajalein
GMT – 11:00	Midway Island, Samoa
GMT – 10:00	Hawaii
GMT – 09:00	Alaska
GMT – 08:00	Pacific Time US, Canada
GMT – 07:00	Mountain Time US, Canada
GMT – 06:00	Central Time US, Canada, Mexico City
GMT – 05:00	Eastern Time US, Canada, Bogota, Lima
GMT – 04:00	Atlantic Time Canada, La Paz
GMT – 03:30	Newfoundland
GMT – 03:00	Brazil, Georgetown, Buenos Aries
GMT – 02:00	Mid-Atlantic
GMT – 01:00	Azores, Cape Verde Islands
GMT	London, Libson, Casablanca
GMT + 1:00	Paris, Brussels, Copenhagen, Madrid
GMT + 2:00	South Africa, Kaliningrad
GMT + 3:00	Baghdad, Riyadh, Moscow, St. Petersburg
GMT + 3:30	Tehran
GMT + 4:00	Abu Dhabi, Muscat, Baku, Tbilisi
GMT + 4:30	Kabul
GMT + 5:00	Ekaterinburg, Islamabad, Karachi, Tashkent
GMT + 5:30	Bombay, Calcutta, Madras, New Delhi
GMT + 6:00	Almaty, Dhaka, Colombo
GMT + 7:00	Bangkok, Hanoi, Jakarta
GMT + 8:00	Beijing, Perth, Singapore, Hong Kong
GMT + 9:00	Tokyo, Seoul, Osaka, Sapporo, Yakutsk
GMT + 9:30	Adelaide, Darwin
GMT + 10:00	Eastern Australia, Guam, Vladivostok
GMT + 11:00	Magadan, Solomon Islands, New Caledonia
GMT + 12:00	Fiji, Auckland, Wellington, Kamchatka

3.4 Parental control

In general a television program is labeled a classification according to the level of violence, nudity and language of its content. When you are watching a program, you can check its program classification on the information box. Refer the information box to §5.1.2.

You can prevent your children from watching specific pro-

grams by specifying a basis classification.



To specify a basis classification, select the **System Setting > Parental Control** menu. At this time, you have to enter Personal Identification Number (PIN). The default personal identification number is '0000'.

Set the Censorship option to your desired classification among the followings:

- No block restricting to no program.
- Total block restricting to every program.
- G restricting to no program. G stands for *General*, content of which is very mild.
- PG restricting to PG or above rated programs. PG stands for *Parental Guidance*, content of which is mild.
- M restricting to M or above rated programs. M stands for *Mature*, content of which is moderate in impact.
- MA restricting to MA or above rated programs. MA stands for *Mature Accompanied*, content of which is strong.
- R restricting to R rated programs. R stands for *Restricted to adults aged 18 years or over*, content of which is very strong.
- AV restricting to AV rated programs. AV stands for *Adult Video*, content of which is very hardcore.


NOTE If a certain program does not have any classification information, your restriction setting will not take effect on it.

If anyone try to watch a program that is out of the basis classification, the person has to enter the personal identification number. To change the number, select the **Change PIN Code** menu; then an input box appears. You have to enter your desired number twice for confirmation.

You can also restrict uses of some menus. Selecting the **Access Control** menu displays a list of menus that you can lock. If the **Time Setting** item is set to **Locked**, you have to enter the personal identification number to use when you have selected the **Time Setting** menu. If you enter a wrong number, you cannot use the menu. Similarly, you have to enter the personal identification number when you have switched on the digital receiver if the **IRD Lock** item is set to **Locked**. IRD is another name of digital receiver. To release a shut item, set it to **Unlocked**.

3.5 Adjusting on-screen display

You can adjust the transparency level of on-screen display. Select the **System Setting** menu and set the **OSD Transparency** option as you desire. Its available range is 0 to 50 percent.

You can adjust the display time of the information box. For detailed descriptions about the information box, refer to §5.1.2. To adjust its display time, select the **System Setting** menu and set the **Info Box Display Time** option as you desire. Its available range is 1 to 30 seconds. If you set this option to **No Info Box**, the information box will not displayed when you switch over services. However, pressing  displays the information box. If you set this option to **Never Hide**, the information box will always be displayed.

You can raise or lower the position of the information box. Select the **System Setting** menu and set the **Info Box Position** option as you desire. Its available range is -10 to +3 line. The more high the value is set, the more low the information box will be positioned.

3.6 To use the time shift feature

You can use the time shift feature with this digital receiver. Time shift just means that the most recent hour of the television service you are watching is saved on the hard disk of the digital receiver. To enable this feature, select the **System Setting** menu and set the **Time Shifting** option to **Enable**. For detailed descriptions about the time shift function, refer to § 5.4.

Chapter 4

Service Search

You have to perform service search after connecting the digital receiver.

4.1 Searching broadcasting services



To perform service search, select the Installation > Service Search menu.

If you have an active antenna, you should set the Antenna Supply 5V option to on to supply power to the amplifier of your antenna. The digital receiver will supply the antenna with 100 milliamperes at maximum.

You should set the **Search Mode** option to **Auto** at the first service search after connecting the digital receiver. The digital receiver will search all available services with automatic search mode. Transponder numbers range from 6 to 12 at VHF and 28 to 69 at UHF.

To search a certain transponder, set the **Search Mode** option to **Manual**, and select your desired transponder at the **Channel** option.

You can search pay services as well as free services. To search only free services, set the **FTA/Scrambled** option to **FTA only**. FTA means free service. To search only pay services, set it to **CAS only**. CAS means pay service. To search both free services and pay services, set it to **FTA + CAS**.

To start service search, select the **Service Search** command. Then appears a list box, in which found services will be listed. Press the **OK** button to save found services when a service search has been completed. To stop service search on the way or exit without saving, press the **EXIT** button.

4.2 Resetting to factory settings

The digital receiver maintains the following data:

- Service list
- Favorite list
- Timer events
- Preference settings

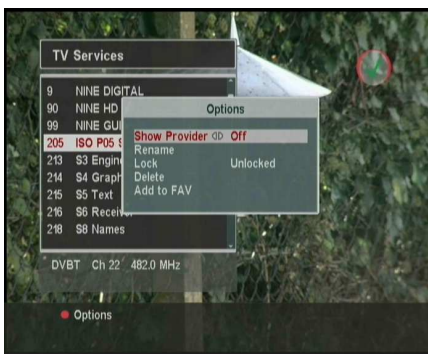
You can reset all data of the digital receiver. To reset all the data, select the **Installation > Factory Setting** menu. Then a confirmation box appears. With the **Yes** reply, service entries, favorite entries and timer events will be all deleted, and preference options will be reset to the manufacturer's factory settings.

Chapter 5

Daily Usage

5.1 Watching television

To switch over to another service, press the **[P+]** or **[P-]** button. Pressing **[↺]** button recalls the service you have watched just before. You can switch to your desired service by entering its service number with the numeric buttons. You can also select a service to watch in the browsable service list. To see the browsable service list, press the **[OK]** button.



The service list enumerates the following items:

- Service number
- Service name
- Transmitting transponder

A dollar mark (\$) may be marked on some entries, which

means pay service. You cannot watch pay services with this receiver.

To select your desired service, put the highlight bar on its entry with the **(P+)** or **(P-)** button and press the **(OK)** button. Then your selected service will be shown. Pressing the **(V-)** or **(V+)** button skips over 10 entries up or down. Selecting a service number with the numeric buttons puts the highlight bar on its entry.

Pressing the **(F)** button displays an option box, in which you can do the following things:

- To browse service entries grouped by service provider, set the **Show Provider** option to on. You may regard a service provider as a transponder.
- To rename the current service entry, select the **Rename** command, then a keyboard appears with which you can enter a name.
- To prevent other family from watching the current service entry, set the **Lock** option to **Locked**. You have to enter PIN code when to watch or unlock a locked service.
- To add the current service entry in a favorite group, select the **Add to Fav** command; then a favorite group list will be displayed. Put the highlight bar of the group list on a desired group and press the **(OK)** button.

5.1.1 Watching favorite services

You can select a service to watch in the favorite list as well as in the service list. To display your favorite list, press the **(FAV)** button; then a favorite group list will be displayed. Whenever moving the highlight bar of the group list up or down, favorite services belonging to a highlighted group are listed.



To select a favorite service of a group, press the **(V+)** button; then the highlight bar of the favorite list becomes movable. Once you select a desired entry with the **(OK)** button, the selected service will be shown. Otherwise to select another group, press the **(V-)** button; then the highlight bar of the group list becomes movable.

If you switch to another service after you have selected a favorite service, it will be also another favorite service of the selected group. The digital receiver will remind you what group you have selected displaying its name on the right top of the screen whenever you switch to another service. If you wish you can select all services, select the All services entry in the favorite list.

For how to edit the favorite list, refer to Chapter 6.





5.1.2 Viewing program information







Pressing **(i)** button displays an information box, in which you can verify the followings:





- Service number
- Service name
- Signal level and quality
- Program name
- Program classification
- Program commentary
- Broadcasting time
- Current time

In addition, you might see the following symbols:


- Subtitle symbol  if subtitles are provided on the current program.
- Teletext symbol  if teletext is provided on the current program.
- Lock symbol  if the current service is locked.
- Dollar symbol **\$** if the current service is a pay service.
- Multifeed symbol  if the current program is provided in multifeed service.


Pressing  button once more displays detailed information about the current program. If an electronic program guide is provided on the current service, you can see the information about next programs with the  or  button. To adjust the sound volume in this case, press the  or  button unceasingly until the sound bar appears and reaches your desired degree. To hide the information box, press the  button.

5.1.3 Selecting an audio track

Some programs are provided with audio tracks of one or more languages. Pressing  button lists, if any, available audio tracks. However, if a multifeed service is available at the moment, a multifeed service list will be displayed. In this case, you have to press  button once more to select an audio track. Select your desired audio language in the list, and it will be sounded. In addition, you could enjoy, if available, one among four sound modes: Stereo, Mono, Left or Right.





5.1.4 Selecting a subtitle track

Some programs are provided with subtitle tracks of one or more languages. When you view an information box, a subtitle symbol () will be marked on it if one or more subtitle

tracks are provided. If it is, press  button, then available subtitle tracks will be listed. Select your desired subtitle language in the list, and it will be displayed.

5.1.5 Viewing teletext

Some programs are provided together with such profitable information as weather reports, news or stock quotations by means of teletext. Televisions are supposed to process teletext; however, there rarely are televisions being incapable of that. Even if your television cannot process teletext, you can enjoy it with the digital receiver.

When you view an information box, a teletext symbol () will be marked on it if it is provided. Press  button to view teletext. You can zoom in the teletext with the  button and adjust the transparency of teletext with the  button. To clear the teletext, press the **EXIT** button.

5.2 Viewing the program guide

The Electronic Program Guide (EPG) is an application used with digital receivers to list current and scheduled programs that are or will be available on each service with a short summary or commentary for each program.



Pressing the **GUIDE** button displays an electronic program guide, in which you can see the following things:

- Scheduled programs
- Program commentary
- Broadcasting date
- Broadcasting time

To see detailed information of a desired program entry, put the highlight bar on your choice with the **[P+]** or **[P-]** button and press **[i]** button.

To switch over to another service, press the **[V-]** or **[V+]** button.

To see an electronic program guide for radio broadcast, press **[R]** button. To turn it back, press **[R]** button again.

Pressing the **[E]** button displays the electronic program guide for each service. To turn it back, press the **[E]** button again.


You can make a timer recording by the electronic program guide, for which refer to §7.1.3.

5.3 Watching multifeed services

Some pay service providers provide one program through several services at the same time but with time differences. Those are called multifeed services.

Service No.	Starting time
101	13:00 PM
102	13:15 PM
103	13:30 PM
104	13:45 PM
105	14:00 PM

For example, assume a movie would be broadcasted through five services like the table on the left. Even if you have missed the first service, you can use the rest service to watch the movie.

When you view an information box, a multifeed symbol () will be marked on it if it is available. To select a multifeed service, press **[M]** button, then available multifeed services will be listed. Select your desired multifeed service in the list, and it will be shown. At this time, you have to press **[M]** button once more to select an audio track.








5.4 Watching by time shift

When you are watching a program, you can reverse and watch it again as if it is a recording. This function is called time shift. When you are watching a program using the time shift function, it is in fact being recorded temporarily.



To use the time shift function, the Time Shifting option have to be set to Enable. Refer the Time Shifting option to § 3.6.

How to use the time shift function is as follows:







1. Press  button, then a time shift begins as a progress bar appears. The progress bar has two pointers. One indicates recording position, and the other indicates a playback position. While this bar is on display, you can move the program backward or forward. Pressing  makes the progress bar appear and disappear alternatively.
2. To find a desired playback position, press  or  button unceasingly until it is found.
3. Pressing the  button reverses the program to 10 seconds back.
4. To end time shift, display the progress bar with  button and press  button.

5.5 Watching by picture in picture



You can watch two services at the same time, one of which is shown in a subpicture. This function is called Picture-in-Picture (PiP).

How to use the picture-in-picture function is as follows:

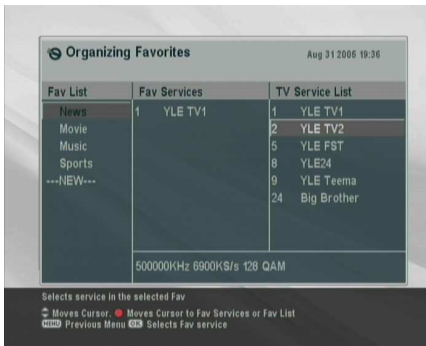
1. Press the  button to display a subpicture, in which another service will be shown.
2. Pressing the  button once more minimizes the subpicture, and pressing it once again hides the subpicture.
3. Pressing the  button interchanges the main-picture with the subpicture. Even when you play back a recording, you can watch a live service in subpicture. However, the picture interchange will not work in that case.
4. Pressing  button moves the subpicture counterclockwise, and pressing  button moves it clockwise.
5. To display a service list for the subpicture, press  button.
6. If both are pay services all, the only main-picture will be shown.

Chapter 6

Listing Services

Editing favorite list

You can make your own favorite service list. To edit your favorite list, select the **Organizing Favorites** menu; then an editable favorite list appears.



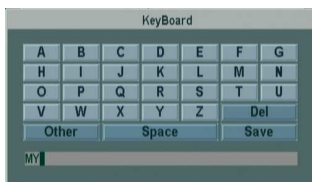
There are a group list on the left column, a favorite list on the center column and a service list on the right column.

You can add a favorite entry performing the following steps:

1. Put the highlight bar on a desired group entry in the group list and press the **OK** button.

2. Then the highlight bar of the service list becomes movable. Put the highlight bar on a desired service entry and press the **OK** button.
3. Then the selected service entry is added in the favorite list. You can select more entries to add.
4. Press the **Left** button to select another group. Whenever pressing the **Left** button, the highlight bar of each column becomes movable in turn.

You can add groups up to 30. To add a group, select the **NEW** command in the group list; then a on-screen keyboard appears.



You can move the highlight key horizontally with the **V-** and **V+** buttons and vertically with the **P+** and **P-** buttons. Pressing the **OK** button on a key enters the corresponding letter in the input line.


To type lower case letters or numerals, select the **Other** key. To delete a letter, put the cursor on a desired letter in the input line and select the **Del** key. You must select the **Save** key to complete naming. Otherwise if you press the **EXIT** button, it will not be named.

To rename a group, put the highlight bar on a desired group entry to rename and press the **Ren** button; then the on-screen keyboard will appear likewise.

To delete a group, put the highlight bar on a desired group entry to delete and press the **Del** button; then a confirmation box appears. The selected group will be deleted with the **Yes** reply.

Similarly, you can delete a favorite entry with the **OK** button in the favorite list.

To add radio services, press **RF** button; then radio service en-

tries will be listed in the service list. To recall the television service list after adding radio services, press  button again.

With your favorite service list, you can select your favorite services more handily. Refer to §5.1 for more descriptions.

Chapter 7

Recording and Playing

With one tuner of the digital receiver, you can record a service and at the same time watch another service if the two services are provided through a same transponder. The TF 6000 PVRt digital receiver has two tuners so that you can enjoy the following things:


- It is possible to record two different services as watching two other different services only if two or more services are provided through a same transponder and the other services are provided through another same transponder. You can watch two services at the same time using picture-in-picture function in this case. For detailed description about the picture-in-picture function, refer to §5.5.
- It is possible to record two different services as watching one of them with time shift function. For detailed description about the time shift function, refer to §5.4.
- It is possible to record two different services as playing back a recording file.

7.1 Recording a program

Once a recording is started, a recording symbol like the next figure will be displayed on the right top of the screen for a few seconds. When you are watching a service different from the service being recorded, you can view a number on the center of the symbol, which indicates the order that the recording is started. The outer circle of the recording symbol indicates progress rate.


NOTE When a recording is finished, it might not be saved if its recording duration is less than 1 minute.

7.1.1 Immediate recording by the remote control

To record a program you are watching at present, press  button.


To pause recording, press  button. To resume it, press  button again.




After a recording is started, pressing  displays a recording control box like the next figure, in which you can specify its duration on which it will be ended.


the current recording will be stopped after the time set to the Duration option. If the information about the next programs is provided through the electronic program guide, the After this program and After next program options would be available. Once the After this program option is selected, the cur-


rent recording will be stopped the moment the current program ends; likewise, once the After next program option is selected, the current recording will be stopped the moment the next program ends.

Selecting the Record pause command pauses recording. When you press  button again to display the recording control box, the Record continue command is displayed instead. Selecting the Record continue command resumes recording.



To stop recording, press  button. Then a confirmation box like the next figure appears, which shows the information of programs being recorded at the moment. Select a program you want to stop.

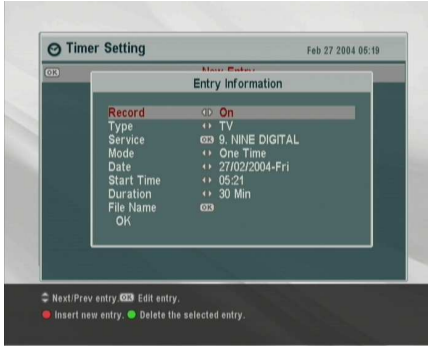
After a recording is started, you can switch over to and watch any other service during the recording. To record another service additionally, switch over to a service you want to record, and press  button.

Once a recording is started, it is put on the recording file list even though it is not finished yet. The recording file is named after its service name with a suffix of a number. To display the recording file list, press  button. For detailed description about the recording file list, refer to §7.2.


7.1.2 Making a timer recording

You can make a program to be recorded at a specific time. Even If the digital receiver is off, it will be turned on and start recording at a time specified. The digital receiver will be turned off again as the recording ends.

42 Recording and Playing



To make a timer recording, select the **Timer Setting** menu; then a timer list appears.

To add a new timer entry, press the  button, and then a timer edit box appears.

You have to set the **Record** option to **On** to record a program. If this option is set to **Off**, the digital receiver will be turned on at a specified time but not record; instead, you may record a program with your video recorder in this case.

If you want to record a radio program, set the **Type** option to **Radio**. Otherwise set to **TV**.

Set the **Service** option to the service which provides the program you want. Pressing the **OK** button on this option displays a service list in which you can select a desired service.

There are 5 timer modes:

One Time means literally 'one time' as it stands.

Every Day means literally 'every day' as it stands.

Every Weekend means 'Saturday and Sunday per week'.

Weekly means 'one day per week'.

Every Weekday means 'from Monday to Friday per week'.

If your favorite program is broadcasted at weekend and you wish to record every episode of the program, set the **Mode** option to **Every Weekend**.

Set the **Date** option to a date, on which your program will be recorded. The date format is *day/month/year–day of the week*.

Set the **Start Time** option to a time, at which your program will be recorded. You can enter it with the numeric buttons. The time format is *hours:minute*.

Set the **Duration** option to a time, after which your recording will be finished.

The allowable maximum value is 23 hours and 55 minutes.

Pressing **[OK]** on the **File Name** option displays an on-screen keyboard, with which you can specify a file name for your timer recording. If you do not specify anything, it will be named after its service name. For how to use the keyboard, refer to Chapter 6.

To make an entry with the above settings, do press the **OK** command. otherwise it will not be made.


You can edit or delete a timer entry in the timer list. To delete a timer entry, put the highlight bar on the entry you want and press the **[M]** button. To edit a timer entry, put the highlight bar on the entry you want and press **[OK]** button, then the timer edit box appears, in which you can change its timer settings.

7.1.3 Recording by electronic program guide









The Australian electronic program guide is provided by IceTV and your digital receiver comes with a 6 month pre-paid subscription. This lets you schedule recordings by simply clicking on the name of the program. The program guide is automatically fetched through the Internet.

For instructions on setting up IceTV please visit <http://www.icetv.com.au/topfield>. How to set a timer recording by the program guide is as follows.

1. Select the service you want to record.
2. Press the **GUIDE** button to display its electronic program guide.
3. Select a program you want to record. Pressed the **OK** button one time, **P** is marked up on the program entry; pressed once more, **R** is marked up. The former indicates turn-on, the latter indicates record-on.
4. This timer recording is put on the timer list. To edit this timer recording, press  button, then a timer edit box appears, in which you can change its timer settings.
5. To remove the marking, press the **OK** button once again.

7.1.4 Recording when using time shift

While you are watching a program by time shift function, you can record the program by performing the following steps:

1. Press  button to start time shift.
2. To find a desired recording position, press  button or  button unceasingly until you find it.
3. Press  button to start recording.
4. Press  button to stop time shift.
5. Press  button once more to stop recording.

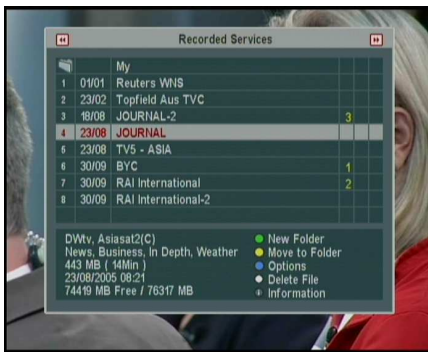
For detailed description about time shift function, refer to § 5.4.

7.2 File list

In recording a program, it is stored as a file in the built-in hard disk of the digital receiver. You can choose and play back a recording file you want in the recording file list.

In addition to the recording file list, there are MP3 file list and Topfield Application Program (TAP) file list. With the digital receiver, you can enjoy music or audio books of MP3 format in the same manner as playing back a recording file.

For detailed description about Topfield application program, refer to Chapter 8.



To see the recording file list, press button.


To turn to another list, press button or button.

In a file list, a file entry is comprised of the following information: file number, file name, recording time, file size and so on. You are able to play back, move, delete, rename and lock a file entry in a file list. You are also able to sort the file entries by file name, recording time or file size. Moreover, you can make a new folder.


To make a new folder

To make a new folder, press button. Then a new folder named GROUP # is created. You can rename the folder in the same manner as renaming a file entry.

To move a file to another folder


To move a file to another folder, put the highlight bar on a file entry you want and press  button. Then a folder list appears. Once you choose a folder in the list, the file gets moved to that folder.

To delete a file

To delete a file, put the highlight bar on a file entry you want and press  button. Then a confirmation box appears. The selected file will be deleted with the Yes reply.


To sort file entries

To sort file entries, perform the following steps:

1. Put the highlight bar on a file entry you want.
2. Press  button to display an option list.
3. Set the **Sorting** option to **Alphabetic**, **Time** or **Size** as you want.
4. Press the **EXIT** button.
5. The file entries are sorted by the option specified.

To rename a file




To rename a file, perform the following steps:


1. Put the highlight bar on a file entry you want.
2. Press  button to display an option list.
3. Select the **Rename** menu to display an on-screen keyboard.
4. Enter and save a file name as you want with the keyboard. For how to use the keyboard, refer to Chapter 6.
5. The file is renamed as specified.

You can rename a folder in the same manner.

To lock a recording file

To lock a file, perform the following steps:

1. Put the highlight bar on a file entry you want.
2. Press  button to display an option list.
3. To lock the file, set the Lock option to Locked.
4. To unlock the file, set the Lock option to Unlocked.
5. Press the  button.
6. A lock symbol  is displayed on the file entry.




When you press the  button on a locked file entry to play it back, you must enter the personal identification number specified in the Parental Control menu. For the Parental Control menu, refer to §3.4.

NOTE This function is available only in the recording file list

7.3 Playing back a recording

When recording a program, all of service characteristics are recorded as they are. So, in playing back a recording file, you can enjoy its audio tracks, subtitle tracks and teletexts if available.








How to play back a recording file is as follows:

1. Press  button to display the recording file list.
2. Put the highlight bar on a file entry you want to play back.
3. Press the  button to start playback.
4. To stop playback, press  button.






Once a playback is started, a playback symbol like the next figure will be displayed on the right top of the screen for a few seconds. The outer circle of the playback symbol indicates progress rate.

During a playback, you can enjoy the following tricks:




- To see the detailed information about a recording file being played back, press  to display an information box. The information box shows its file name, broadcaster information, service information, duration and so on.
- To pause playback, press  button. To resume it, press  button.
- To find a desired playback position, press  button or  button unceasingly until you find it.
- To see the current playback position, press  button to display a progress bar. To hide the progress bar, press  again.




You can specify a playback position entering percent with the numeric buttons when the progress bar is hidden.

7.3.1 To play back in slow motion

To play back in slow motion, press  button on playback. Whenever pressing  button, playback speed changes in 3 steps: $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{1}{8}$ times speed. To return to normal speed, press  button.




7.3.2 To play back in fast motion

To play back in fast motion, press  button on playback. Whenever pressing  button, playback speed changes in 3 steps: 2, 4 and 6 times speed. To return to normal speed, press  button.

The digital receiver can play back not only forward but also backward in fast motion. To play back backward in fast motion, press  button. Whenever pressing  button, playback speed changes in 3 steps: 1, 2 and 3 times speed. To turn to forward playback, press  button.



7.3.3 To play back recordings in sequence

The digital receiver can play back several recording files in sequence. To use this utility, perform the following steps:




1. Press  button to display the recording file list.
2. Select file entries you want to play back by pressing  button.
3. When a file entry is selected, it is numbered.
4. Press the  button to start playback after selecting all of your entries.
5. The selected recording files are played back in sequence that they are numbered.


7.3.4 To make a bookmark



You can specify a playback position as a bookmark with  button and jump to the position with  button. You can make 64 bookmarks at maximum. Bookmarks are stored with the recording file so that you can use them again afterwards. To use this utility, perform the following steps:




1. Start playback of a recording file you want.

2. To add a bookmark, press  button at a position you want.
3. To jump to a following bookmark, press  button.
4. To delete a bookmark, jump to the bookmark you want and press  button.








When there is no preset bookmark, pressing  button makes a jump forward 30 seconds.

7.3.5 To play back a recording repeatedly

The digital receiver can play back a recording file repeatedly both in whole and in part.

To play back a recording file repeatedly in whole, press  button on condition that the progress bar is hidden. Then an information box with a repeat symbol  is displayed. To quit the repeated playback, press  button again.






To play back a recording file repeatedly in part, perform the following steps:

1. Start playback of a recording file you want.
2. Press  button to display a progress bar.
3. Find one end position of a block you want to specify with  button or  button.
4. Press  button at the position, then the point starts to blink.
5. Find the other end position.
6. Press  button at the position again, then the block turns to green and starts to be played back repeatedly.
7. Press  button to hide the progress bar.
8. To withdraw the block, press  button on condition that the progress bar is displayed.

7.4 Editing a recording






7.4.1 To erase a block from a recording

You can cut out a block such as commercial film from a recording file by performing the following steps:

1. Start playback of a recording file you want.
2. Press  button to display a progress bar.
3. Find one end position of a block you want to specify with  button or  button.
4. Press  button at the position, then the pointer starts to blink.
5. Find the other end position.
6. Press  button at the position again, then a confirmation box appears.
7. Select the Cut command, then the block is erased.





7.4.2 To store a block from a recording

You can store a block from a recording file by performing the following steps:

1. Start playback of a recording file you want.
2. Press  button to display a progress bar.
3. Find one end position of a block you want to specify with  button or  button.
4. Press  button at the position, then the pointer starts to blink.
5. Find the other end position.
6. Press  button at the position again, then a confirmation box appears.


7. Select the **Save** command, then the block is stored. The stored file will named after its source file with a suffix of 'CUT' and a number

In addition, you can copy a recording file in whole or in part when playing back it.

1. Start playback of a recording file you want.
2. Find a desired position from which a copy will be started with  button or  button.
3. Press  button.
4. Pressing  button stops copying. The copied file will be named after its source file with a suffix of 'COPY' and a number.



Once a copy is started, a copying symbol like the next figure will be displayed on the right top of the screen for a few seconds. To see copying status, press




 button. The outer circle of the copying symbol indicates progress rate.





NOTE If copying time is less than about 1 minute, the copying will not be done successfully. It is recommended not to change the playback speed.



7.5 Playing a MP3


To play a MP3 file with the digital receiver, you have to transfer your MP3 files to the digital receiver from your personal computer. For how to transfer your MP3 files to the digital receiver, refer to § 10.3 or Chapter 9.

To play a MP3 file, perform the following steps:

1. Press  button, and then press  button or  button to display the MP3 file list.

2. Put the highlight bar on a file entry you want to play. If you want to play several files, select them with  button.
3. Press  button to start play.
4. To see the detailed information about a MP3 file being played, press  to display an information box. The information box shows its file name, album, artist, duration and so on.
5. To stop play, press  button.

When a MP3 file is being played, pressing `linefigRepeatButton` turns around repeat mode, symbol of which is displayed on the information box.  symbol represents that the current MP3 file will be played repeatedly.  symbol represents that all selected MP3 files will be played repeatedly in turn.

To play all MP3 files in a subfolder, select a desired folder and press  button.

7.6 Formatting hard disk

To format the hard disk of the digital receiver, select the Installation > Format Hard Disk menu.

Formatting the hard disk will delete all files permanently. If a new hard disk drive is installed, it must be formatted because the file system of the digital receiver is different from any of the personal computer. You cannot use time shift and record functions with an unformatted hard disk.

Chapter 8

Topfield Application Program




If you are good at programming with C++ language, you can make a program executable in the digital receiver. We call this Topfield Application Program (TAP). In making a TAP, it is recommended to use *Diab* compiler of *Wind River*, whose web site address is <http://www.windriver.com>. Some variants of GCC compiler also might perhaps be available as a compiler for TAPs. You can get the Application Program Interface (API) libraries for TAPs from the Topfield web site, <http://www.i-topfield.com>.

Your TAPs will be run under the following conditions:

- Their extension name is *tap*. If they have any other extension name, they will be ignored.
- They are in the Program Files folder. If they are in other folders, they will be ignored.

For how to transfer your program to the digital receiver, refer to §10.3 or Chapter 9.


To run a TAP in the digital receiver, perform the following steps:

1. Press  button to display the program file list.
2. Place the highlight bar on a file entry you want to run.
3. Press the  button to start the program.
4. To exit the program, press the  button.



The figure on the left is a running screen of a TAP, *Image Viewer*, which displays image files of BMP, GIF and JPG format. This TAP is available from the Topfieldweb site, <http://www.i-topfield.com>.

In the program file list, you can use a variety of file control functions including: renaming, sorting, deleting and so on. For detailed descriptions about file control functions, refer to §7.2.

If you want a program to run automatically when the digital receiver starts up, move the program to the Auto Start folder. Press the  button at start-up if you want the program not to run.

Chapter 9

Accessing to The Digital Receiver

IMPORTANT The following section describes complex functions that should only be used by owners with advanced computer knowledge.

The Wireless networking is also used for accessing the IceTV Electronic Program Guide. For instructions on configuring for IceTV please visit <http://www.icetv.com.au/topfield>.

The TF 6000 PVRt digital receiver has a web server and a FTP server which you can access through Wireless Local Area Network (WLAN). You can set a timer recording or download a record file by the web service of the digital receiver. Here you need an Access Point (AP), which will connect the digital receiver with your computer or the Internet.

To use the web service of the digital receiver, you should perform the following steps:

1. Configuring an access point for the digital receiver.
2. Configuring the WLAN settings of the digital receiver.

3. Accessing the home page of the digital receiver.

Refer to §9.3 for detailed descriptions about things you can use on the web service of the digital receiver.

NOTE The web server and FTP server of the digital receiver don't work in standby mode. So it must be powered up all the time if you wish to use the web service at any time.

9.1 Configuring the access point

In this section, the setup program of *WRT54G*, which is an access point manufactured by *Linksys*, will be referred to as an exemplary description to help your understanding of how to configure your access point for the digital receiver's wireless connection. For detailed descriptions of how to set up the access point, refer to the manual of your access point.

9.1.1 To access the digital receiver indoors

Once your access point is powered up, whether it is connected to the Internet or not, a local area network is created.

Local IP Address :	<input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="1"/> . <input type="text" value="1"/>
Subnet Mask :	<input type="text" value="255"/> . <input type="text" value="255"/> . <input type="text" value="255"/> . <input type="text" value="0"/>
DHCP Server :	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Starting IP Address :	<input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="1"/> . <input type="text" value="100"/>
Maximum Number of DHCP Users :	<input type="text" value="50"/>
Client Lease Time :	<input type="text" value="0"/> minutes (0 means one day)
WINS :	<input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/> . <input type="text" value="0"/>

You can let the access point automatically assign a dynamic IP address to a computer or device connected to the network by enabling the DHCP server of the access point. In this case, you can access the digital receiver if you know the IP address which is assigned to the digital receiver by the access point.

For how to verify the dynamic IP address assigned, refer to § 9.2.1.

If the digital receiver reboots, a new dynamic IP address will be assigned to it. You have to assign a static IP address to

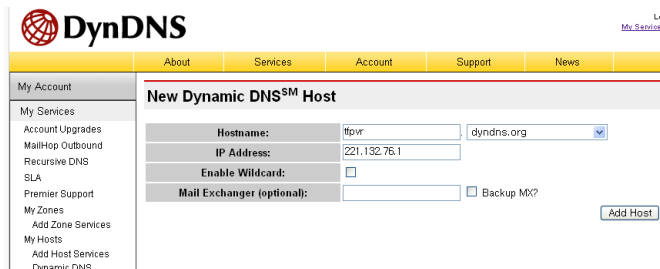
the digital receiver to avoid this inconvenience. To assign a static IP address, you have to disable the DHCP server of the access point and register an available IP address to the digital receiver. For how to assign a static IP address, refer to §9.2.2.

9.1.2 To access the digital receiver outdoors

When you are outdoors, you can access the digital receiver in your home if your access point is configured to route your request to the digital receiver by port forwarding. By this feature, the access point will connect you to the digital receiver when you try to access it with the IP address of the access point.

Port Range					
Application	Start	End	Protocol	IP Address	Enable
PVRHTTP	80	to 80	Both	192.168.1.161	<input checked="" type="checkbox"/>
PVRFTP	20	to 21	Both	192.168.1.161	<input checked="" type="checkbox"/>
	0	to 0	Both	192.168.1.0	<input type="checkbox"/>
	0	to 0	Both	192.168.1.0	<input type="checkbox"/>

Your access point may be assigned to a dynamic IP address by a Internet Service Provider (ISP). So if the access point has rebooted, you cannot access it as long as someone in your home does not inform you of the changed IP address. However, many access points support Dynamic Domain Name System (DDNS) service, which can settle this problem.



The screenshot shows the DynDNS website interface. At the top, there is a navigation bar with links for 'About', 'Services', 'Account', 'Support', and 'News'. Below this, there is a sidebar menu with options like 'My Account', 'My Services', 'Account Upgrades', 'MailHop Outbound', 'Recursive DNS', 'SLA', 'Premier Support', 'My Zones', 'Add Zone Services', 'My Hosts', 'Add Host Services', and 'Dynamic DNS'. The main content area is titled 'New Dynamic DNS Host' and contains a form with the following fields:

- Hostname:** 'fivr' and 'dyndns.org' (dropdown menu)
- IP Address:** '221.132.76.1'
- Enable Wildcard:**
- Mail Exchanger (optional):** Backup MX?

An 'Add Host' button is located at the bottom right of the form.

If you use a DDNS service, you can access the access point with the domain name that you specified for it not a IP address.

How to use the DDNS service is as follows:

1. Join a web site of which DDNS service is supported by your access point.
2. Configure the access point with your account of the web site.

DDNS Service :	<input type="text" value="DynDNS.org"/>
User Name :	<input type="text" value="yihoze"/>
Password :	<input type="password" value="*****"/>
Host Name :	<input type="text" value="tjpr.dyndns.org"/>
Internet IP Address :	221.132.76.3
Status :	DDNS is updated successfully

When a new dynamic IP address is assigned to the access point, it will inform the DDNS service provider of the new IP address. This makes it possible that you can access the access point with its domain name at any time.

9.2 Configuring the digital receiver's WLAN settings



To configure or identify the wireless local area network (WLAN) settings, select the Installation > WLAN Setting menu.

9.2.1 WLAN status



A service set identifier (SSID) is a sequence of characters that uniquely names a wireless local area network. SSID shows the network accessed by the digital receiver at the present.

There are two modes for Network type. One is infrastructure mode and the other is ad-hoc mode. Infrastructure mode allows a wireless LAN to be integrated into an existing wired network through an access point (AP). Ad-hoc mode is used for a simple peer-to-peer network. This mode only allows the sharing of local resources between wireless clients without an AP.

TX Rate shows the transfer rate between the digital receiver and the AP or other wireless clients.

Channel is automatically assigned to if Network Type is set to Infrastructure.

Security shows the encryption type specified.

IP Address, Subnet Mask and Gateway show the network information specified.

MAC Address shows the media access control address of the digital receiver.

9.2.2 IP configuration



You can configure the network information for the digital receiver in this menu. User ID and Password are used to access the digital receiver's web server or FTP server.

9.2.3 Advance configuration



You can configure in details the network environment for the digital receiver in this menu.

Wireless Mode

- 0: 802.11 B/G mixed.
- 1: 802.11 B only

TX Burst

802.11 B/G Protection

- 0: Auto

- 1: Always on

- 2: Always off

Ad-Hoc Mode Rate

- 0: Adhere Wi-Fi spec

- 1: Violate Wi-Fi spec

TX Rate

0: Auto	9: 24 Mbps
1: 1 Mbps	10: 36 Mbps
2: 2 Mbps	11: 48 Mbps
3: 5.5 Mbps	12: 54 Mbps
4: 11 Mbps	
5: 6 Mbps	Short Slot Time
6: 9 Mbps	0: Disable
7: 12 Mbps	1: Enable
8: 18 Mbps	

9.2.4 Profile

In this menu, you can do things as follows:

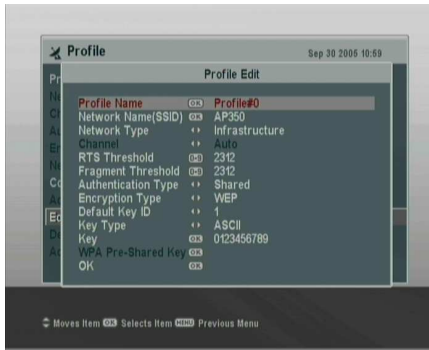
- Identifying the profile information selected.
- Choosing a profile and configuring the network information with that.
- Adding, editing and deleting a profile.



The value of Country Region is applied to every profile the same. It is not possible to specify this option differently per profile.

Table 9.1: Country Region

Value	Channel Range	Country
FCC	1–11	USA
IC	1–11	Canada
ETSI	1–13	Europe, Korea
SPAIN	10–11	Spain
FRANCE	10–13	France
MKK	14	Japan
MKK1	1–14	Japan
ISRAEL	3–9	Israel



The profile information consists of options as follows:

Profile Name You can name a profile.

Network Name (SSID) You can name or choose a SSID.

Channel If the **Network Type** option is set to **Infrastructure**, then this option is set to **Auto**. Otherwise if it is set to **Ad Hoc**, then you can specify this option depending on the value of the **Country Region** option.

Authentication Type Open, Shared and WPAPSK is available for this option.

Encryption Type Not Use, WEP, TKIP and AES is available for this option. If the **Authentication Type** option is set to Open or Shared, then Not Use or WEP is available

to set. Otherwise if it is set to WPAPSK, then TKIP or AES is available to set.

Default Key ID Only if the Authentication Type option is set to Not Use or WEP, then it is allowed to specify this option.

Key Type Only if the Authentication Type option is set to Not Use or WEP, then it is allowed to specify this option.

Key If the Authentication Type option is set to Not Use, then it is allowed to type 10 hexadecimal characters or 5 ASCII characters. Otherwise if it is set to WEP, then it is allowed to type 26 hexadecimal characters or 13 ASCII characters.

WPA Pre-Shared Key Only if the Authentication Type option is set to WPAPSK, then It is allowed to type 8 to 64 ASCII characters.

To save the settings, select the OK command. To configure the network information with the profile chosen, set the Activate option to on.

9.3 Accessing to the web server

In the web pages provided by the digital receiver, you can do the following things:

- Downloading or uploading a recording, MP3 or application program file.
- Recording a program
- Setting a timer recording
- Viewing the current recording information
- Viewing the current recorder information

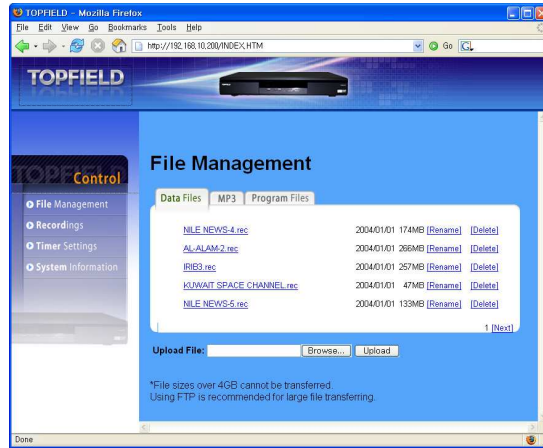
NOTE It is recommended to use *Internet Explorer* web browser in order to fully enjoy the above facilities. If you use a different web browser such as *Netscape Navigator*, some problems may occur.

To access the digital receiver's home page, enter the digital receiver's IP address, or domain name if you use a DDNS service, in your web browser.



You cannot only download but also upload recording files or MP3 files in the File Management page. However, if you wish to download or upload a file whose size is 2 gigabyte or more, it is recommended to use the FTP server rather than the web server

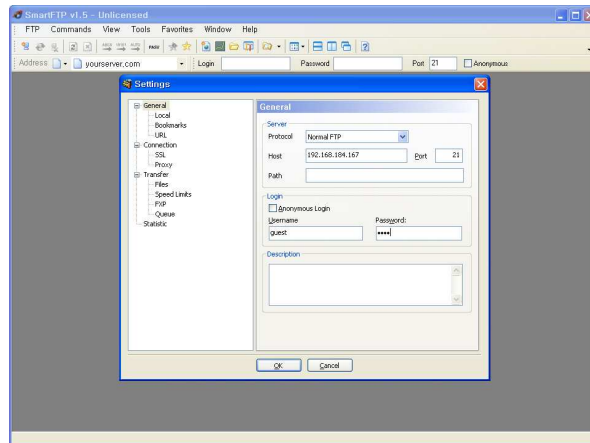
66 Accessing to The Digital Receiver



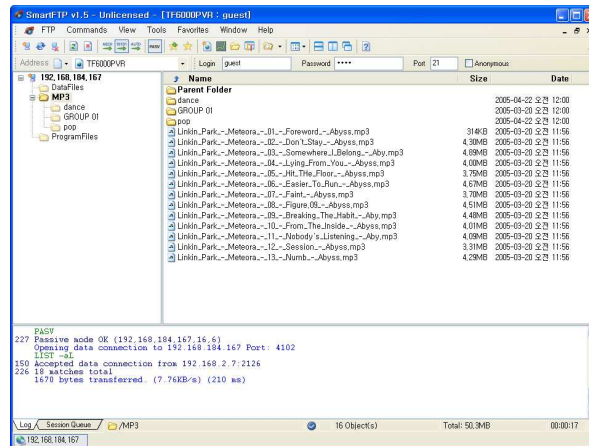
NOTE The maximum number of the user connection is only one. This means that you cannot access the web server while someone else is occupying it.

9.4 Accessing to the FTP server

You need a FTP client program to access the digital receiver's FTP server.



You can log in the FTP server with the user name and password specified in the WLAN Setting menu. For how to configure WLAN settings, refer to § 9.2.



NOTE The maximum number of the user connection is only one. This means that you cannot access the FTP server while someone else is occupying it.

Chapter 10

Firmware Update and Data Transfer

The digital receiver has a stable and convenient firmware to use. However, a new firmware may be released to improve the digital receiver. You can get a latest firmware and update utilities from the Topfield web site, <http://www.i-topfield.com>.



You should check the firmware information of your digital receiver before downloading a new firmware. To check the current information of the digital receiver, select the Information > IRD Status menu.

NOTE You have to update with only the new firmware of which System ID is identical to yours. otherwise you

will fail in firmware update.

10.1 Updating the firmware

From a computer via USB port

You can transfer a new firmware to the digital receiver from your computer connecting them with a USB cable. You need *TFDN_USB*, the firmware transfer utility for this, which is available at the Topfield web site, <http://www.i-topfield.com>.

To update firmware with this method, perform the following steps:

1. Download a new firmware applicable to the digital receiver from the Topfield web site.
2. Download *TFDN_USB* from the Topfield web site.
3. Plug a USB cable into the **USB** port on the digital receiver and the corresponding port on your computer.
4. Turn on the digital receiver.
5. Run *TFDN_USB*.

How to use *TFDN_USB* is as follows:



1. Press **[Find]** button to select the new firmware file.
2. Press **[Download]** button to start the file transfer.
3. Press **[Stop]** button to cancel the file transfer.
4. Restart the digital receiver.

From a computer via RS232 port

It is possible to transfer a new firmware to the digital receiver from your computer connecting them with a RS232 cable. You need *TFD-Down*, the firmware transfer utility for this, which is available at the Topfield web site, <http://www.i-topfield.com>.

To update firmware with this method, perform the following steps:

1. Download a new firmware applicable to the digital receiver from the Topfield web site.
2. Download *TFD-Down* from the Topfield web site.
3. Plug a RS232 cable into the RS-232 port on the digital receiver and the corresponding port on your computer.
4. Turn on the digital receiver.
5. Run *TFD-Down*.

How to use *TFD-Down* is as follows:



1. Press **[Find]** button to select the new firmware file.
2. Press **[Download]** button to start the file transfer.
3. Press **[Stop]** button to cancel the file transfer.
4. Restart the digital receiver.

From another digital receiver via RS232 port

It is possible to transfer a new firmware to the digital receiver from another same digital receiver connecting them with a RS232 cable.

To update firmware with this method, perform the following steps:

1. Plug a RS232 cable into the RS-232 port on the digital receiver and the other's.
2. Turn both of them on.
3. Select the Installation > Transfer Firmware > Transfer Firmware to Other IRD menu.

10.2 Transferring the receiver data

The digital receiver retains such data as follows:

- Service list
- Favorite list
- Preference settings

It is possible to transfer receiver data to the digital receiver from another same digital receiver connecting them with a RS232 cable.

To transfer receiver data, perform the following steps:

1. Plug a RS232 cable into the RS-232 port on the digital receiver and the other's.
2. Turn both of them on.
3. Select the Installation > Transfer Firmware > Transfer Data to Other IRD menu.

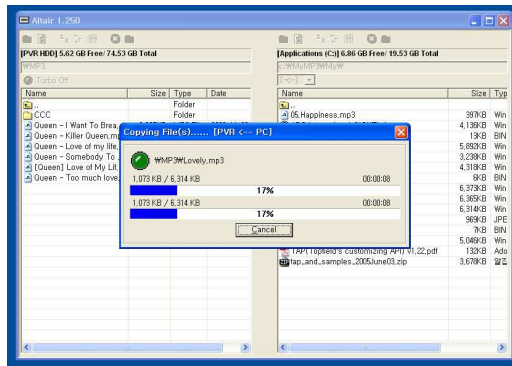
NOTE All of preference settings are transferred together with service information when transferring receiver data. This means that you will lose all of your own data. So You had better memorize some important data such as video settings before starting transfer to avoid re-setting them.

10.3 Transferring recording files

It is possible to transfer recording files from the digital receiver to your computer connecting them by a USB cable. The file transfer program, *Altair* is needed here, which is available at the Topfield web site, <http://www.i-topfield.com>.

The method is as follows:

1. Download *Altair* from the Topfield web site.
2. Plug a USB cable into the USB port on the digital receiver and the corresponding port on your computer.
3. Turn on the digital receiver.
4. Run *Altair*.



How to use *Altair* is as follows:

1. Select a file to transfer. The left hand list box displays recording files in the digital receiver, and the right hand list box displays files in your computer.
2. To start a transfer from the digital receiver to your computer, press \rightarrow button.
3. To start a transfer from your computer to the digital receiver, press \leftarrow button.

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Warranty Information

Do not return this card to TOPFIELD AUSTRALIA

Equipment Details

Model	Serial Number	Date of Purchase
TF 6000 PVRt		

Please keep warranty card, proof of purchase and all manuals in a safe place as you will require these when making a warranty claim.

Ensure that the following conditions are followed when operating the equipment. Failure to do so may result in warranty being void.

- Do Not place the unit in a confined cabinet or cupboard without proper ventilation.
- To prevent shock or hazard risk. Do Not place Liquid or Fluids near the appliance.
- Do Not place appliance in a dusty or wet location.
- Full warranty conditions are listed on the rear of this card.
- Prior to making a claim you should read through the troubleshooting section in the manual and consult the Topfield Australia web site, <http://www.topfield.com.au>.

For further Warranty information or to make a claim please contact Topfield Australia on 1300 889 803.

12 month warranty is offered by the Manufacturer Topfield Co.,Ltd.
Hanseo Bldg, 246-3, Seohyeon-dong, Bundang-gu,
Seongnam, 463-824, Korea.

Topfield Australia acts as the Service agent in Australia for the manufacturer's warranty and can be contacted on 1300 889 803.

Warranty Conditions

1. Where required by Topfield Australia only the original invoice/receipt issued by the dealer will be accepted as proof of purchase.
2. Topfield Australia may reject warranty claims on equipment which it believes to be illegally acquired or when the 'owner' is unable to provide proof of purchase or where security labels or serial numbers have been tampered with or removed.
3. The warranty covers only defects in the material and workmanship of the product for a period of 12 months from the date of original purchase.
4. This warranty is on 'Return to Base' basis. The owner is responsible for the delivery of the equipment to the point of purchase and for collecting the repaired or replaced equipment from the same location.
5. The warranty is void if failures arise as a result of any of the following. i) Abuse, misuse, physical impact, normal wear and tear. ii) Alteration or repairs carried out without written authorization from Topfield Australia. iii) Upgrade that are not registered by Topfield Australia. iv) Operating or maintained other than in accordance with the manual supplied.
6. This equipment will not be considered defective as a result of incompatibility with other equipment or accessories other than the ones supplied with the unit at the time of purchase.
7. This unit should be returned in its original carton and protective packaging or alternatively in a packing suitable to prevent damage. Topfield Australia will not accept any responsibility for goods damaged whilst the goods are in transit.
8. Repair or replacement under the terms of this warranty does not give the right to extension or a beginning of a new warranty period. Repairs or replacements may be carried out with functionally equivalent reconditioned parts or equivalent part. Parts that have been replaced become the property of Topfield Australia.
9. The customer acknowledges that no promise representation or undertaking has been given by Topfield Australia or its dealer in relation to equipment other than as contained in this warranty.
10. A service charge will apply if the fault is not covered within the conditions of this warranty or if there is no fault found. The charge will be based on the current market rate.
11. Topfield Australia is not liable for any other loss other than the unit itself.
12. Nothing contained in this warranty shall be read or applied so as to affect the right of the consumer in relation to the provisions of the trade practices act or other statutory rights provided by legislation of the state or territory. In the absence of applicable legislation this warranty will be purchases sole and exclusive remedy and neither Topfield Australia nor its distributors or agents shall be liable for any incidental or consequential damages for breach of any express or implied warranty of this equipment.



Correct disposal of this product

This marking shown on the product or its literature indicates that it should not be disposed with other household wastes at the end of its working life.

To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product or their local government office for details of where and how they can dispose this product for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

Topfield continues to improve the digital receiver which this guide explains. So some explanations and illustrations in this guide could be different from the real digital receiver.